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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,059	05/25/2007	Kurt Tschannen	F-343	9261
43419 7590 01/14/2011 PAULEY PETERSEN & ERICKSON 2800 WEST HIGGINS ROAD SUITE 365 HOFFMAN ESTATES, IL 60169				
EXAMINER				
PATTON, SPENCER D				
ART UNIT		PAPER NUMBER		
3664				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/582,059

Applicant(s)

TSCHANNEN, KURT

Examiner

SPENCER PATTON

Art Unit

3664

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-945)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/11/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The IDS filed 12/11/2006 has been entered. Claims 1-10 are pending.

Drawings

2. The drawings are objected to because the labels in Figures 18 and 19 should be provided in English. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure is objected to because it is not clearly written. Correction is required. See MPEP § 608.01(b).
4. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification can be found at the fourth paragraph on page 20 and the second paragraph on page 23.
5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

6. Claims 2 and 5 are objected to because of the following informalities:
- Claim 2 is not clearly worded and should be rewritten. Examples of unclear language include: "wherein when the airplane is on an airfield one of standing and rolling;" "upon landing automatically a correct airfield map is switched on." Is this an automatic landing, or is the airfield map switched on automatically?
- Claim 2: it is not clear what is encompassed by "another map."
- Claim 2: "the approach" lacks antecedent basis.

Claim 5, line 4: the period "." after "navigation" should be deleted.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 1-10** are rejected under 35 U.S.C. 102(b) as being anticipated by Briffe et al (US Patent No. 6,112,141).

Briffe et al teaches:

Re claim 1. A method for a navigation of airplanes from port to port using GPS signals, the method comprising: the navigation being effected with an integrated Flight Management System (FMS) (column 5, lines 44-46; column 7, lines 20-28) based on digital cards (column 12, lines 57-65) and a position determination by GPS signals corrected by GPS reference signals (column 6, lines 53-63), wherein depending on a momentary position and movement condition of the airplane a card on which a movement is based is automatically selected from a library and displayed on a screen (column 36, lines 19-27; column 27, lines 53-55; and column 30, line 60 through column 31, line 3).

Re claim 2. Wherein when the airplane is on an airfield one of standing and rolling, a correct airfield map is displayed on the screen, during a departure procedure, a correct departure map is displayed on the screen, when the airplane is in enroute, a correct one of IFR, VFR and another map is displayed on the screen, and for the approach a correct approach map is switched on and upon landing automatically a correct airfield map is switched on (column 36, lines 19-27; column 27, lines 53-55; and column 30, line 60 through column 31, line 3).

Re claim 3. Wherein as an approach and landing help, a GNSS 3-D trace channel is displayed on the screen, wherein a trace channel is set by geographic data and is coupled to an approach map, wherein the trace channel is continuously calculated by differential-GPS data and is displayed (Figures 14-16 and 24).

Re claim 4. Wherein terrain data from a terrain data base are displayed in a representation of the trace channel (Figures 14-16 and 24).

Re claim 5. A device for carrying out the method according to claim 1, wherein the device comprises the FMS (flight management system) (column 5, lines 44-46), a differential GPS receiver (column 6, lines 53-63), a computer with navigation. software (column 15, lines 51-60), a database with digital maps (column 15, lines 51-60) and at least one screen for displaying a map (Figure 1), and entering keys (column 5, lines 44-46).

Re claim 6. Wherein another screen displays different flight and navigation aids, including IFR instruments, artificial horizon, and engine instruments (Figure 1; column 7, lines 58-67; column 11, lines 12-20).

Re claim 7. Wherein the instruments to be displayed are selected and operated by buttons (column 8, lines 1-18).

Re claim 8. Wherein a digital library comprises all maps necessary for flights, airfield data, terrain data and data of further navigation aids (column 30, line 60 through column 31, line 9).

Re claim 9. A device according to claim 8, wherein the digital library comprises flight manuals, check lists and technical documents (column 22, lines 11-26; "operational procedures" teaches "flight manuals").

Re claim 10. Wherein the navigation software is built up in modules and comprises program modules (Column 5, line 66 through column 6, line 17).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Briffe et al (US Patent No. 6,112,141) as applied to claim 1 above, and further in view of Ramier et al (US Patent No. 5,289,185).

The teachings of Briffe et al have been discussed above. In the event that the broadest reasonable interpretation of "GNSS 3-D trace channel" is not considered to be taught by Briffe et al, which demonstrates the displacement of the aircraft in three dimensions, this limitation is taught by Ramier et al at column 3, lines 4-27. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the 3D tunnel of Ramier et al with the display system of Briffe et al because Ramier et al teaches that such a 3D tunnel is an effective landing aid for a pilot to visualize the necessary path for a safe landing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SPENCER PATTON whose telephone number is (571)270-5771. The examiner can normally be reached on Monday-Thursday 7:30-5:00; Alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on (571)272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SPENCER PATTON/
Examiner, Art Unit 3664
/KHOI TRAN/
Supervisory Patent Examiner, Art Unit 3664